**Supplementary File 2.** Table: Sites within ancestral sequences that could not be determined with a high degree of confidence (sites with a posterior probability of <0.8 in all attempted ancestral sequence inferences).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ancestor** | **Alignment File**  | **Site number** | **Inferred state (p)** | **Best alternative (p)** |
| A0 | SI File 1 | 601120146319752313261627212753 | T (0.79)G (0.57)T (0.69)G (0.68)T (0.66)A (0.79)C (0.79)T (0.79) | C (0.19)C (0.38)C (0.31)T (0.31)A (0.33)G (0.11)G (0.18)C (0.19) |
| A1 | SI File 1 | 107184141614211435143917841826262027062709 | C (0.64)C (0.71)A (0.60)A (0.59)G (0.62)G (0.61)G (0.46)G (0.68)C (0.58)A (0.76)T (0.52) | T (0.34)T (0.29)G (0.39)G (0.41)C (0.38)T (0.38)T (0.43)T (0.32)T (0.42)T (0.24)C (0.48) |
| A2 | SI File 2 | 131725892614261726542661267326852715273327682772278127842785 | A (0.65)T (0.78)C (0.77)A (0.77)G (0.79)G (0.75)G (0.77)C (0.77)T (0.76)C (0.74)A (0.73)C (0.69)T (0.69)A (0.79)G (0.79) | G (0.34)G (0.09)A (0.10)G (0.10), T(0.10)T (0.11)T (0.14)A (0.11), T (0.11)A (0.11), T (0.11)C (0.12), G (0.12)G (0.13). T (0.13)C (0.13), T (0.13)A (0.14), T (0.14)A (0.17)C (0.17)A (0.17) |
| A3 | SI File 2 | 24611361944275427712779 | A (0.80)T (0.79)T (0.80)C (0.71)C (0.79)G (0.73) | G (0.14)A (0.15)G (0.14)A (0.12). T (0.12)A (0.14)A (0.12), T (0.12) |
| A4 | SI File 3 | 581013244726542781278327842785 | A (0.63)A (0.73)A (0.58)C (0.65)T (0.79)A (0.80)T (0.79)A (0.79) | C (0.37)G (0.26)C (0.33)T (0.25)G (0.21)C (0.16)C (0.17)T (0.17) |
| A5 | SI File 2 | 25892614261726212654266126732685270627152733276827722781278327842785 | C (0.78)C (0.77)C (0.77)T (0.78)A (0.75)C (0.75)T (0.77)A (0.77)T (0.62)C (0.76)A (0.74)T (0.73)T (0.69)A (0.69)C (0.80)T (0.79)T (0.79) | A (0.09), T (0,09)A (0.10), T (0.10)A (0.10), T (0.10)G (0.17)T (0.11)T (0.14)A (0.11), C (0.11)C (0.11), T (0.11)C (0.24)G (0.12). T (0.12)C (0.13), T (0.13)G (0.14), T (0.14)A (0.14). G (0.14)T (0.17)T (0.16)C (0.16)A (0.16) |
| A6 | SI File 2 | 258925972614261726612733276827722781 | A (0.80)C (0.80)T (0.78)C (0.78)T (0.77)C (0.79)A (0.77)A (0.71)C (0.71) | G (0.08), T (0.08)T (0.11)A (0.09), G (0.09)A (0.09), T (0.09)C (0.13)G (0.11), T (0.11)C (0.11), T (0.11)G (0.11), T (0.11)T (0.16) |